Joint Mediation of Psychosis and Mental Stress on Alcohol Consumption and Graduates' Job Performance: A PLS Structural Equation Modelling

Valentine Joseph Owan[*1,5], **Jennifer Uzoamaka Duruamaku-Dim**[2], **Abigail Edem Okon**[1], **Levi Udochukwu Akah**[3], **Daniel Clement Agurokpon**[4,5]

[1]Department of Educational Foundations, University of Calabar, Calabar, Nigeria.
[2]Department of Guidance and Counselling, University of Calabar, Calabar, Nigeria.
[3]Department of Human Kinetics and Health Education, University of Calabar, Nigeria
[4]Department of Microbiology, Cross River University of Technology, Calabar, Nigeria
[5]Ultimate Research Network, Calabar, Cross River State, Nigeria.
*Corresponding Author; Email: owanvalentine@gmail.com

Abstract

Previous research has interlinked alcohol consumption (AC), mental stress (MS), psychotic experiences (PE) and academic performance (AP) of students and psychological behaviour of the general population. The current study seems to be the first to consider the joint and partial mediation effects of MS and PE in linking AC to graduates' job performance in specific areas such as teamwork (TW), communication competence (CC), customer service (CS) and job functions (JF). A virtual cross-section of 3,862 graduates with self-reported cases of having taken alcohol in the past participated in the study. These participants responded to an electronic questionnaire that was mailed to them. The instrument used for data collection had acceptable psychometric properties. The study used the partial least squares structural equation modelling (PLS-SEM) to achieve its objectives. The inner and outer models were all evaluated for quality and goodness of fit. Results showed a significant negative effect of AC and MS on graduates' job performance in terms of TW, CC, CS and JF, respectively. AC had a significant positive effect on MS and PE. MS has a significant positive effect on PE. A significant joint mediation effect of MS and PE was found in linking AC to graduates' TW, CC and CS, excluding JF. MS partially mediated AC's paths to all the graduates' job performance indicators. PE was only a significant partial mediator of the connection between AC to JF, but not TW, CC and CS. This study's result can help improve graduates' work effectiveness and has revealed some negative predictors. Therefore, it is recommended that graduates avoid alcohol or only consume mild quantities of it to enable them to discharge services effectively at the workplace.

Keywords: Alcohol use, higher education, mental health, psychotic episodes, SmartPLS.

Introduction

The need to promote service quality in formal and informal organisations has attracted the attention of many stakeholders and researchers, who are now paying closer attention to graduates' job performance. Generally, job performance has been defined as actions or behaviours that employees engage in to achieve organisational goals (Christian et al., 2011; Wang et al., 2010). Specifically, graduates' job performance refers to how well an employer is impressed with the services of graduate employees after conducting an assessment (Odigwe et al., 2018). In this study, we defined graduates' job performance as the extent to which holders of higher education certificates and diplomas can discharge assigned duties effectively to realise set objectives. Measures of graduates' job performance include competence, knowledge application, ability to work with minimal supervision and resourcefulness (Abas & Imam, 2016; Caballero & Walker, 2010; Molefe, 2012; Plantilla, 2017). Others include timeliness, attention to detail, speed, flexibility and ability to work under pressure (Owan, Odigwe, et al., 2022). Other performance indicators include teamwork, communication competence, customer service, productivity, practical demonstration, discharge of assigned job functions, problem-solving and versatility (Owan & Agunwa, 2019).

Despite these critical indicators, it has been documented that the job performance of some graduates is abysmal at the workplace (Odigwe et al., 2018). A misalignment between graduates' school grades and their ability to do practical tasks after gaining employment has been documented (Arop et al., 2018; Bassey et al., 2019). Other scholars have revealed that employers encounter various obstacles when hiring university graduates due to poor work performance and ineptitude (Chikazhe et al., 2022). Most employers have also complained about the skills gap between graduates' expected and actual performance (Muchemwa, 2017). This tendency has prompted numerous researchers to question the quality of the Nigerian educational system (Irele & Kayode, 2019; Sengsri & Agbi, 2020).

Many reasons have been blamed for the disparity between school and employment performance. It is claimed that enormous student enrolment jeopardises higher education service delivery and produces graduates with employability and performance issues (Chikazhe et al., 2022; Ekaette et al., 2019, 2020). Other scholars have attributed it to graduates being unprepared, having too much theory and insufficient practical content, and engaging in unethical academic activities for good school grades (Arop et al., 2018; Madukwe et al., 2019). Poor school financing (Akomolafe & Aremu, 2016; Odigwe, 2020; Odigwe & Owan, 2019), parental socioeconomic level, nutrition (Akah, Owan, Uduigwomen, et al., 2022), residence, peer pressure, school administration, and evaluation techniques (Onyebuchukwu et al., 2015) are other suspected variables affecting graduates' job performance. For improvement, it has been suggested that rather than relying just on academic grades (which might be deceptive), higher education graduates should have their productivity in the workplace and degree of experience, talents, and competencies evaluated (Ajjawi et al., 2020; Bassey et al., 2019; Espinoza et al., 2020; Nabulsi et al., 2021).

The current study uses these issues to shed more light on other factors that could affect higher education graduates' performance in the workplace. These include alcohol consumption, mental stress, and psychotic experiences. According to some scholars, these variables were considered since numerous physical, behavioural, and psychological changes occur throughout late adolescence and early adulthood due to obligations and expectations (Chacón et al., 2018). The influence of social groups and being away from one's family and home causes these changes in physiology, sociology, and culture (Tanner & Arnett, 2016). Besides, many graduates seem to be intense at the prospects of securing good jobs as they venture into adulthood to occupy central places in society. Failure to meet these aspirations often promotes frustrations, fear, and anxiety. As a coping strategy, most of them resort to alcohol consumption and other substance abuse (Dorn-Medeiros & Doyle, 2018; Spadola et al., 2018; Tretyak et al.,

2022). Since most graduates have greater freedom in making choices (Bewick et al., 2008; Karam et al., 2007), their decisions could be effective or otherwise. For this reason, a study on alcohol consumption, mental stress and psychotic experiences became important.

Previous studies on job performance have linked the construct to predictors such as vocational training duration (Odigwe et al., 2018), recruitment procedures, selection and work readiness (Caballero & Walker, 2010), entrepreneurship skills (Undiyaundeye & Otu, 2015), nationality and personality traits (Ajanovic et al., 2021), among other variables. None of these studies assessed the contribution of alcohol consumption on job performance, nor the mediation of mental stress and psychotic experiences on the link. Instead, previous research had focused mainly on the general population, without a specific focus on higher education graduates. While it can be argued that graduates are a part of the general work population, not all employees are higher education graduates.

Previous research on graduates' job performance often treated the construct unidimensionally (Chikazhe et al., 2022; Odigwe et al., 2018; Plantilla, 2017; Undiyaundeye & Otu, 2015); whereas it has been argued that job performance, as an abstract construct, is multidimensional (Ajanovic et al., 2021). Similarly, a study found three dimensions of job performance: job time, quality and quantity (Na-Nan et al., 2018). Even though some job performance dimensions can be generalised, some may differ between jobs (Ajanovic et al., 2021), whereas others can depend on the context and operational definition of the construct. Along these lines, the current study treated graduates' job performance multidimensionally by focusing on aspects such as teamwork, communication competence, customer service and job functions.

Literature Review
Alcohol Consumption (AC)

Studies on AC and mental stress have yielded varied results, although most studies tend to agree that AC affects the cognitive performance of individuals (Gunn et al., 2018; Rehm et al., 2017). According to the affect regulation model, stress and alcohol use are intertwined in a transactional process in which stressors cause discomfort and people self-medicate with alcohol to decrease the unpleasantness of stress (Grzywacz & Almeida, 2008). High-stress levels were linked to increased alcohol consumption in both men and women (Keyes et al., 2011). Similarly, a previous study proved that addictive substances like alcohol and opioids are closely linked to a tendency toward risky behaviour, mental problems, and poor performance (Kiepek & Baron, 2019). This implies that someone who has been a heavy drinker for a long time is likelier to feel anxious in stressful situations than someone who has never consumed alcohol or drunk lightly.

Studies on AC and psychotic experiences have provided ample evidence that consistent use of alcohol may cause psychosis (known as substance-induced psychosis). For instance, it has been documented that individuals that drink too much and are experiencing symptoms like hallucinations and delusions may have developed alcohol-related psychosis (Mauri et al., 2018). Earlier research showed that people with alcoholism may also have a mental illness and that people with schizophrenia and other psychotic illnesses are more likely to have issues with alcohol and other drugs, with prevalence rates as high as 50% (Addington & Addington, 2007; Petersen et al., 2007). Like first-episode psychosis, drinking and drug misuse issues are far more common in these individuals (Margolese et al., 2004). Furthermore, other studies have proven alcoholism is linked to PTSD symptoms and psychotic events (Debell et al., 2014; Kachadourian et al., 2014). This shows that trauma and post-traumatic stress disorder (PTSD) co-occur with problematic alcohol consumption in various samples. A previous study has also documented that alcohol use as a coping mechanism is associated with violent behaviours due

to mental alterations (Bonomi et al., 2018). Similarly, another study found that alcohol use was associated with anxiety and depressive symptoms among males and females since COVID-19 started (Tran et al., 2020). This also tallies with another research which found a high correlation between increased alcohol consumption and mental health problems (Jacob et al., 2021).

Previous studies on AC and performance have documented an unfavourable effect of excessive alcohol consumption on consumers' outcomes (Atoyebi et al., 2020; Castellanos-Perilla et al., 2022; Hakulinen & Jokela, 2019; Rehm et al., 2017; Romac et al., 2022). The negative effect occurs in specific areas such as mood (Alford et al., 2020), workplace productivity (Łyszczarz, 2019; Stepanek et al., 2019) and presenteeism (Buvik et al., 2018; Lee et al., 2021). Other analyses have shown marginal consequences of drinking on educational performance (Eze et al., 2017; Zadarko-Domaradzka et al., 2018). It has been argued that alcohol consumption reduces human performance generally, regardless of whether it is consumed in a modest amount (Osain & Alekseevic, 2010). Furthermore, other scholars have clarified that, while exceptions exist, high consumption of beverages such as local beer cocktails contributes to the poor performance of academic activities by students (Eze et al., 2017), leading to half-baked students in society (Ajayi & Somefun, 2020; Dumbili, 2015). Regarding school performance, there is evidence that substantial variations exist in the academic performance of students who consume alcohol versus others who do not (Onyebuchukwu et al., 2015; Zadarko-Domaradzka et al., 2018). Another piece of evidence indicates that alcohol intake substantially decreases by almost one-tenth of the standard deviation by academic performance (Carrell & West, 2010). Therefore, students' use of alcohol in schools may likely continue even after graduation since alcohol-induced psychosis, hallucinosis and paranoia are known to only occur in chronic alcoholics who have been drinking for a long time and in large quantities (Revadigar & Gupta, 2022).

The bulk of the literature in this section tends to have a general agreement on the direction of effect of alcohol consumption on consumers' mental health, psychotic experiences and performance. Nevertheless, much of it has been on the general population, with no study found using graduates' samples. Studies on AC and performance have mainly dwelt on students' school performance, with none considering their workplace performance. This creates a gap in knowledge requiring further investigations to determine how alcohol consumption might influence graduates' out-of-school performance. The current study addressed this gap.

Mental Stress

In the general population, epidemiological studies have shown a clear correlation between (subclinical) psychotic experiences and regular exposure to critical life events that produce stress (Kelleher et al., 2013; Varese et al., 2012). Such events, defined as arising beyond sleep or drug use, may be assessed as clinically significant symptoms (hallucinations or delusions) by subclinical experiences, not triggering activity that seeks support (Yung & Lin, 2016). Another study investigated the connection between stressful life experiences (SLEs) and psychotic encounters in adolescence using a structural equation model fitting (Shakoor et al., 2016). SLEs were shown to associate substantially with optimistic psychotic symptoms. Likewise, the findings of another analysis showed a strong association between perceived stress and psychotic experiences even after adjusting for depression (Turley et al., 2019). More specifically, it was proven in another research that greater stress sensitivity was linked to a higher risk of psychotic episodes even after controlling for co-occurring anxiety and depressive symptoms (DeVylder et al., 2016). Other studies have also documented a connection between psychological stress and people's experiences with psychosis (Bolhuis et al., 2018; Kelleher et al., 2015).

Another study (Jones et al., 2020) discovered that exposure to stressful events, among other variables, was linked to an increased likelihood of developing psychotic characteristics.

It has also been reported that people with mood swings are more likely to develop psychotic feelings (Smith & Dubovsky, 2017; Zahodne et al., 2015). After correcting for sex and age, a study has found higher family functioning to dramatically reduce the impact of perceived stress on psychotic-like symptoms (Wu, Zou, et al., 2021). Additionally, some recent studies have found a clear association between routine exposure to stressful life events and psychotic episodes in a general population (DeVylder et al., 2020; Kelleher et al., 2015; Yates et al., 2019). Research reveals that the connection mediated problems with emotional regulation between psychotic experiences and nightmares (Akram et al., 2020). Although the results of all the studies cited tend to agree that a high-stress level is connected to higher chances of individuals developing psychosis, they mostly drew their results from general populations. This study seems to be the first to assess this connection in a graduate population.

Past studies on mental stress have also documented its negative effect on the job performance of academic staff (Aduma et al., 2022; Akah, Owan, Aduma, et al., 2022; Daniel, 2019) and other work-related variables such as productivity (Ma & Ye, 2019; Ramos-Galarza & Acosta-Rodas, 2019) and job satisfaction (An et al., 2020; O'Brien et al., 2019). This means that the more academic staff are exposed to stressful conditions, the higher the declining chances of their job performance, other things being equal. Since academic staff are all graduates, the results of the cited studies are pretty helpful to the current study focusing solely on graduates' job performance. Nevertheless, job performance in these studies was treated unidimensionally, whereas, in the current study, job performance is operationalised into four indicator areas. This was done because job performance is a multidimensional construct (Ajanovic et al., 2021).

Another study reported that academic stress dramatically affects students' performance; stress impairs people's capacity to learn, work, and concentrate, all of which contribute to subpar work and performance (Pascoe et al., 2020). A previous study found that very high levels of persistent mental stress were linked to worse academic performance (Lee et al., 2021). Mental stress, on the other hand, disrupts people's thoughts (Kaiser et al., 2015; Rosiek et al., 2016), reasoning (Hidalgo et al., 2019; Schoofs et al., 2009), and functioning (Yaribeygi et al., 2017). Stress decreases students' ability to learn in class and causes a lack of attention, resulting in subpar work and low academic grades (Pascoe et al., 2020). There is a negative correlation between academic stress and students' performance; therefore, the more stressed a student is, the worse their academic achievement (Aafreen et al., 2018; Herath, 2019; Oduwaiye et al., 2017; Oketch-oboth, 2018). While several studies have identified a link between stress and academic success, others contradict conventional findings, arguing that students with high and moderate stress levels did better than those with lower stress levels (Kumari & Garita, 2012; Mohamad et al., 2018). Going by the disagreements in the results of different researchers, the connection between mental stress and academic performance is still debatable, up for question and requires further investigation and proof.

Previous studies on mental stress and students' performance have mostly considered students' school performance, neglecting their out-of-school performance. Thus, the degree to which mental stress affects graduates' job performance remains unclear. This often ignored aspect of performance is the primary reason for setting up schools. Schools were designed to equip learners with skills to enable them to function independently. To date, this study seems to be the first or among the very few thinking in this direction. This study attempted to bridge this gap in the literature and contribute to the ongoing debate.

Psychotic Experiences

Research showed that psychotic episodes and psychotic diseases share genetic, cognitive, and environmental risk factors (Linscott & van Os, 2013; Zavos et al., 2014). Since most prospective research on psychotic experiences has focused on severe adult consequences,

little is known about whether psychotic episodes hurt job performance. In the past, psychotic experiences have been linked to worse academic success in adolescents and adults (Davies et al., 2018; Wu, Liu, et al., 2021). It has also been documented that cognitive impairment is linked to an increased risk of psychosis (Khandaker et al., 2011). Consequently, children with psychotic experiences had worse educational results than their non-affected counterparts (Steenkamp et al., 2021). As with the preceding sections, research on psychosis and performance has dwelt solely on students' academic achievement. To our knowledge, no previous study has linked psychotic experiences among the graduate population intending to understand the role in their out-of-school performance. This neglected area is begging for research to expand the frontiers of knowledge, hence the present study.

Purpose of the study

This study was designed to precisely estimate:

i.   the direct effects of Alcohol Consumption (AC), Mental Stress (MS), and Psychotic Experiences (PE) on graduates' job performance indicators such as Teamwork (TW), Communication Competence (CC), Customer Service (CS) and Job Functions (JF);
ii. the direct effect of AC on MS and PE, and MS on PE;
iii. the joint mediation effect of MS and PE in linking AC to graduates' job performance indicators;
iv. the partial mediation effect of MS and PE in the nexus between AC and graduates' job performance indices;
v.   the mediation of PE in the link between MS and graduates' job performance variables.
vi. the amount of variance in TW, CC, CS and JF that AC, MS and PE can jointly explain;
vii. the degree of variation in PE that AC and MS can jointly explain.

Methods

Design and study participants

The cross-sectional survey research design was employed in this study (Hall, 2008). All Nigerian graduates from higher education institutions who received their certificates or diplomas between 2015 and 2020 made up the study's population. A virtual cross-section of 3,862 graduates who self-reported having consumed alcohol in the past served as the study's sample. These individuals answered a questionnaire that was sent to them electronically. The study's participants were 57% (n = 2201) males and 43% (n = 1661) females. The average age of the participants was 24.5 years. Regarding religion, 56% (n = 2163) were Christians, whereas 44% (n = 1699) were Muslims. Regarding educational qualifications, 40% (n = 1545) held Higher National Diploma, 51% (n = 1970) and 9% (n = 347) were Bachelor's and Master's degree holders respectively. The distribution for respondents' year of graduation were as follows – 2015 (10%, n = 386), 2016 (13%, n = 502), 2017 (16%, n = 618), 2018 (23%, n = 888), 2019 (15%, n = 580), 2020 (23%, n = 888).

Data collection instruments

A questionnaire composed of five sections was used for data collection. Respondents' biographical information, including age, sex, religion, level of education, and year of school completion, was gathered in Section 1. The National Council on Alcoholism and Drug Dependence of the San Fernado Valley created the Michigan Alcohol Screening Test (MAST), which was the basis for the 15 questions in section 2 (the Alcohol Consumption Scale [ACS]). The ACS uses patient self-reports of alcohol consumption to screen for alcohol difficulties in the general population with a 98 per cent accuracy rate. As in the original form, the items on

the AIS were scored using a dichotomous system (Yes = 1; No = 2). The sum of a person's scores on all 15 items yields their degree of alcohol use.

Ten items measuring mental stress were included in Section 3 of the electronic survey (Mental Stress Scale [MSS]), which was based on the Perceived Stress Scale (PSS) created and verified by some researchers (Cohen et al., 1983). The responses for the MSS items ranged from 0 to 5, according to the original (PSS) six-point Likert scale. The scores from the 10 elements are added together to provide a final mental stress score. Ten modified questions from the Questionnaire for Psychotic Experiences (QPE) made up Section 4 (Psychotic Experiences Scale [PES]) of the electronic survey. The same six-point Likert scale and response choice as the MSS was also used for the PES items.

There are 25 items in Section 5 (Graduates' Job Performance Scale [GJPS]) that assess graduates' performance on the job. We created items in section 5 based on our expertise and information from a literature review. The 25 questions in section 5 were grouped into four categories. These include job functions, communication competence and teamwork (each with six items), customer service (with five items), and communication competence (with seven items). A 6-point linear scale, ranging from 0 to 5, was used to grade each question in Section 5 of the online survey.

Validity and Reliability of the instrument

A paper version of the instrument was made and sent to nine specialists at three public universities in South-South Nigeria. The instrument was submitted as part of a suite that included a document outlining the primary goals and hypotheses of the study so that readers could comprehend the scope of the investigation. There were three specialists in the fields of psychology, three in the field of measurement and evaluation, and three in the field of health education. Because the researchers believed they had the necessary expertise to evaluate the items, they considered experts in these three fields. Part 2 (ACS) and section 3 (MSS) were the primary areas of concentration for the specialists in health education. Section 4 (PES) was for psychologists, and section 5 (GJPS) was for measurement experts. The critical task for each expert was to rank the degree to which the items were understandable and pertinent when evaluating the variables in the target areas.

We employed expert evaluation reports to calculate the instrument's Item Content Validity Indices (I-CVIs) and Scale Content Validity Indices (S-CVIs). For relevance, I-CVI varied from .79 to .99 across all variables, whereas I-CVI ranged from .78 to .99 for clarity. S-CVI for all constructs varied from .87 to .90 (for clarity) and .85 to.90 (for relevance). Eight recent college graduates who were not a part of the study's subjects participated in a focus group discussion (FGD) on the instrument's second iteration. The graduates qualitatively assessed each item to determine its acceptability, sufficiency, and existence of any potential omissions. The final draft of the instrument was updated to include the focus group's recommendations. To assess the degree of internal consistency of the final instrument draft, 50 non-sample graduates participated in a trial test. The reliability test was carried out using the Cronbach's Alpha internal consistency method, with coefficients ranging from .86 to .90.

Procedure for data collection and analysis

The data for this study was gathered in two steps by the researchers. In the first phase, the researchers emailed the responders information about the study, its goals, and why they were asked to participate. A follow-up email with a link to the online survey created with Google Forms was sent after receiving written informed consent to participate. Three thousand eight hundred sixty-two unique replies were obtained during the 18-month data gathering

project. The collected data were cleaned, wrangled, and converted to prepare them for analysis. With the use of SmartPLS software, partial least squares structural equation modelling (PLS-SEM) was employed for data analysis. PLS-SEM was chosen over the covariance-based SEM because our data failed the normality test, leading to distribution problems that only PLS-SEM has the comparative advantage to handle over other programmes.
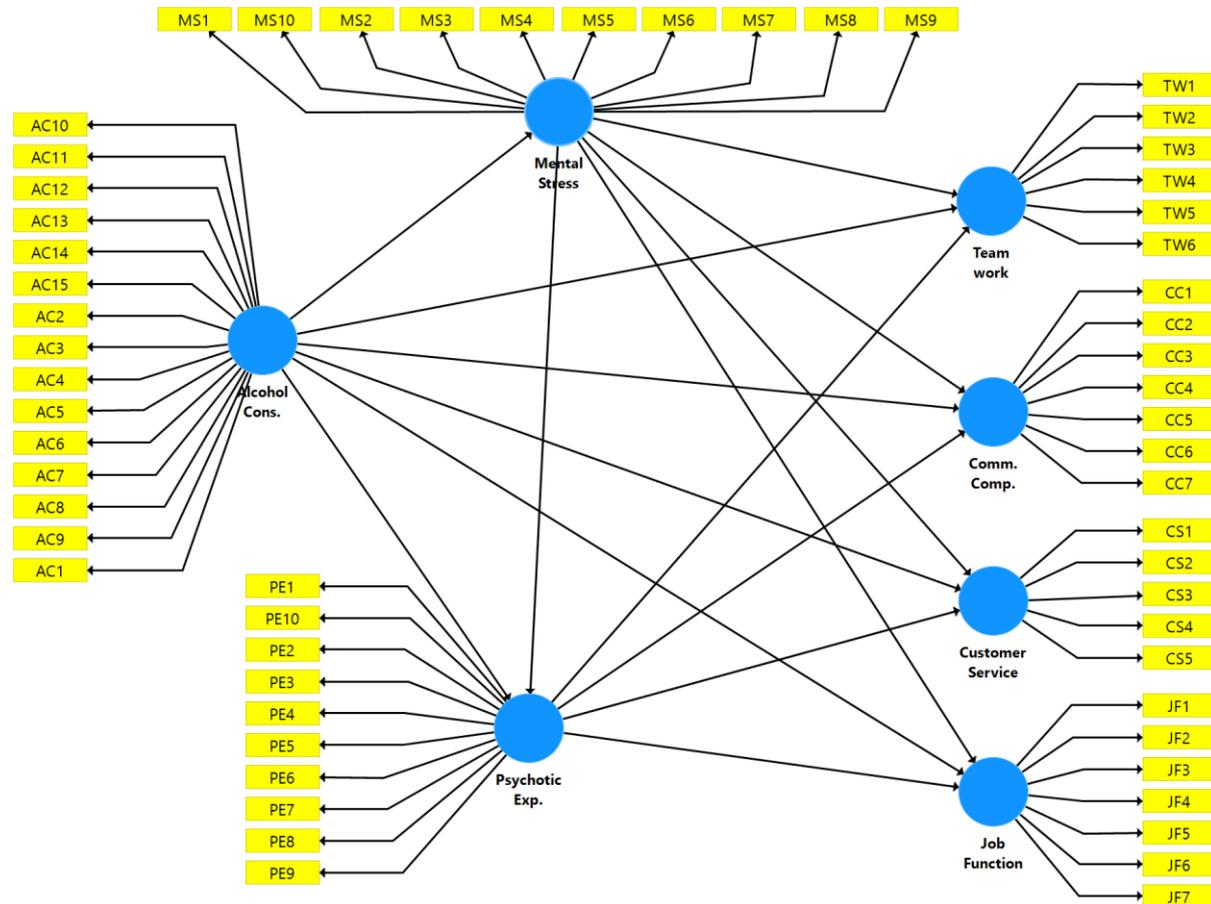

Figure 1: A hypothesised causal model of alcohol consumption, mental stress, psychotic experiences and graduates' job performance in terms of teamwork, communication competence, customer service and job functions

Results

Hypothesis 1

Alcohol Consumption (AC), Mental Stress (MS) and Psychotic Experiences (PE) have significant direct effects on graduates' job performance in terms of Teamwork (TW), Communication Competence (CC), Customer Service (CS) and Job Functions (JF). Table 1 reveals a significant direct negative effect of AC on graduates' job performance in terms of TW (β = -.25, 95%CI[-.31, -.19], p <.000), CC (β = -.42, 95%CI[-.48, -.35], p < .001), CS (β = -.46, 95%CI[-.53, -.40], p < .000), and JF (β = -.52, 95%CI[-.58, -.45], p < .001), respectively. Therefore, our hypothesis was supported (for AC). Table 1 also shows that MS has a significant direct negative effect on graduates' job performance in terms of TW (β = -.33, 95%CI[-.42, -.24], p < .001), CC (β = -.31, 95%CI[-.42, -.22], p < .001), CS (β = -.22, 95%CI[-.35, -.11], p < .001) and JF (β = -.28, 95%CI[-.41, -.16], p < .001). Thus, the hypothesis earlier formulated was upheld. Furthermore, Table 1 shows that PE has a non-significant direct positive effect on graduates' job performance in terms of TW (β = .01, 95%CI[-.10, .11], p > .05), CC (β = .10, 95%CI[-.02, .23], p > .05) and CS (β = .14, 95%CI[.00, .29], p > .05) respectively. However,

PE has a significant direct positive effect on graduates' job performance in terms of JF (β = .27, 95%CI[.12, .42], p < .001). Following this result, our hypothesis was not supported for PE versus TW, CC, and CS; it was, however, supported (for JF).

Hypothesis 2

There is a significant direct effect of AC on MS and PE, respectively, while MS has a direct effect on PE. Table 1 reveals a significant direct positive effect of AC on MS (β = .81, 95%CI[.80, .82], p < .001) and PE (β = .26, 95%CI[.22, .30], p < .001) respectively. According to Figure 2, alcohol consumption is sole accountable for 65% (R^2 = .65, 95%CI[.63, .67], p < .001) of the total variance in graduates' mental stress. Thus, we can hold other predictors accountable for 35% of the unexplained proportion of variance in the graduates' mental stress. The coefficient of determination (R^2) was proven to be statistically significant; hence our hypothesis was empirically supported. Furthermore, Table 1 indicates that MS has a significant direct positive effect on PE (β = .70, 95%CI[.65, .74], p < .001). Our hypothesis for the effects of AC and MS was confirmed based on these results.

Table 1: Direct effects

Hypothesis	β	95%CI	M	SD	t (β/SD)	P
AC → CC	-.42***	-.48, -.35	-0.42	0.03	12.89	.000
AC → CS	-.46***	-.53, -.40	-0.47	0.03	13.64	.000
AC → JF	-.52***	-.58, -.45	-0.52	0.03	15.76	.000
AC → MS	.81***	.80, .82	0.81	0.01	119.64	.000
AC → PE	.26***	.22, .30	0.26	0.02	11.89	.000
AC → TW	-.25***	-.31, -.19	-0.25	0.03	7.72	.000
MS → CC	-.31***	-.42, -.22	-0.32	0.05	6.25	.000
MS → CS	-.22***	-.35, -.11	-0.23	0.06	3.60	.000
MS → JF	-.28***	-.41, -.16	-0.28	0.06	4.32	.000
MS → PE	.70***	.65, .74	0.70	0.02	31.79	.000
MS → TW	-.33***	-.42, -.24	-0.33	0.04	7.67	.000
PE → CC	.10	-.02, .23	0.10	0.07	1.54	.120
PE → CS	.14	.00, .29	0.15	0.07	1.91	.060
PE → JF	.27***	.12, .42	0.27	0.08	3.42	.000
PE → TW	.01	-.10, .11	0.01	0.05	0.19	.850

***Significant at the .001 alpha level

Hypothesis 3

There is a significant joint mediation effect of MS and PE linking AC to graduates' job performance indicators. The results in Table 2 shows a significant joint mediation effect of MS and PE in linking AC to graduates' job performance in terms of TW (β = -.26, 95%CI[-.32, -.21], p < .001), CC (β = -.17, 95%CI[-.22, -.12], p < .001) and CS (β = -.06, 95%CI[-.12, -.01], p < .05), respectively. However, MS and PE did not jointly mediate the relationship between AC and graduates' job performance in terms of JF to a significant extent (β = .00, 95%CI[-.07, .05], p > .05). Therefore, our hypothesis was supported for the link between AC and TW, CC and CS; whereas, it was not supported for the link between AC and JF.

Table 2: Joint mediation effects of MS and PE on different links

Hypothesis	β	95%CI	M	SD	t (β/SD)	p
AC → CC	-.17***	-.22, -.12	-0.17	0.03	6.64	.000
AC → CS	-.06*	-.12, -.01	-0.06	0.03	2.21	.030
AC → JF	.00	-.07, .05	-0.01	0.03	0.15	.880
AC → TW	-.26***	-.32, -.21	-0.26	0.03	9.7	.000

***Significant at .001 level
*Significant at .05 alpha level

Hypothesis 4

There is a significant partial mediation effect of MS and PE in the nexus between AC and graduates' job performance indices. Table 3 shows that mental stress has a significant partial mediation effect on the paths linking AC to graduates' job performance in terms of TW (β = -.27, 95%CI[-.34, -.20], $p < .001$), CC (β = -.25, 95%CI[-.33, -.17], $p < .001$), CS (β = -.18, 95%CI[-.27, -.09], $p < .001$), and JF (β = -.23, 95%CI[-.32, -.12], $p < .001$). Following this result, our hypothesis was supported by the evidence presented.

Table 3 also shows that PE has a significant partial mediation effect on the connection between AC and graduates' job performance in terms of JF (β = .07, 95%CI[.03, .11], $p < .001$). However, PE did not partially mediate AC's connection to graduates' job performance in terms of TW (β = .00, 95%CI[-.02, .03], $p > .05$), CC (β = .03, 95%CI[-.01, .06], $p > .05$) and CS (β = .04, 95%CI[.00, .07], $p = .05$). Therefore, our hypothesis was partly supported for PE's mediation effect on AC and JF. However, it was not supported for the link between AC to other graduates' job performance indices such as TW, CC and CS.

Hypothesis 5

The mediation of PE in the link between MS and graduates' job performance variables is statistically significant. Table 3 indicates that PE significantly mediates the link between MS and graduates' job performance in terms of JF (β = .19, 95%CI[.08, .28], $p < .001$) to a significant extent. However, PE has no significant mediation effect in linking MS to graduates' job performance in terms of TW (β = .01, 95%CI[-.07, .08], $p > .05$), CC (β = .07, 95%CI[-.02, .15], $p > .05$) and CS (β = .10, 95%CI[.00, .19], $p = .05$). Based on this evidence, the hypothesis was partly supported for path MS → PE → JF. However, it was not supported for the following paths MS → PE → TW, MS → PE → CC and MS → PE → CS.

Table 3: Partial mediation effects of MS and PE

Mediation paths	β	95%CI	M	SD	t (β/SD)	p
AC → MS → TW	-.27***	-.34, -.20	-0.27	0.04	7.59	.000
AC → MS → CC	-.25***	-.33, -.17	-0.25	0.04	6.31	.000
AC → MS → CS	-.18***	-.27, -.09	-0.18	0.05	3.71	.000
AC → MS → JF	-.23***	-.32, -.12	-0.22	0.05	4.22	.000
AC → PE → TW	.00	-.02, .03	0	0.01	0.18	.850
AC → PE → CC	.03	-.01, .06	0.03	0.02	1.58	.120
AC → PE → CS	.04	.00, .07	0.04	0.02	1.93	.050
AC → PE → JF	.07***	.03, .11	0.07	0.02	3.39	.000
MS → PE → TW	.01	-.07, .08	0.01	0.04	0.18	.850
MS → PE → CC	.07	-.02, .15	0.07	0.04	1.59	.110
MS → PE → CS	.10	.00, .19	0.1	0.05	1.97	.050
MS → PE → JF	.19***	.08, .28	0.18	0.05	3.41	.000

***Significant at the .001

Hypothesis 6

There is a significant variance in TW, CC, CS and JF that AC, MS and PE can jointly explain. Figure 2 shows that the predictors (AC, MS, and PE) jointly accounted for 30% ($R^2 = .30$, $95\%CI[.28, .32]$, $p < .001$), 37% ($R^2 = .37$, $95\%CI[.35, .39]$, $p < .001$), 29% ($R^2 = .29$, $95\%CI[.27, .31]$, $p < .001$), and 29%% ($R^2 = .29$, $95\%CI[.27, .31]$, $p < .001$) of the total variance in graduates' job performance in terms of teamwork, communication competence, customer service and job functions, respectively. By implication, 70, 63, 71 and 71% of the unexplained variance in TW, CC, CS and JF are attributable to other predictors not included in the model. According to the results, the proportion of variances in the endogenous explained jointly by the exogenous variables are all statistically significant. Therefore, our hypothesis received statistical support.

Hypothesis 7

The degree of variation in PE that AC and MS can jointly explain is significant. Figure 1 shows that alcohol consumption and mental stress jointly explained 85% ($R^2 = .85$, $95\%CI[.83, .87]$, $p < .001$) of the total variance in graduates' psychotic experiences . This result suggests that 15% of the unaccounted portion of the variance is explainable by other extraneous variables not included in the model. The variance explained was statistically significant; hence, our hypothesis was supported.
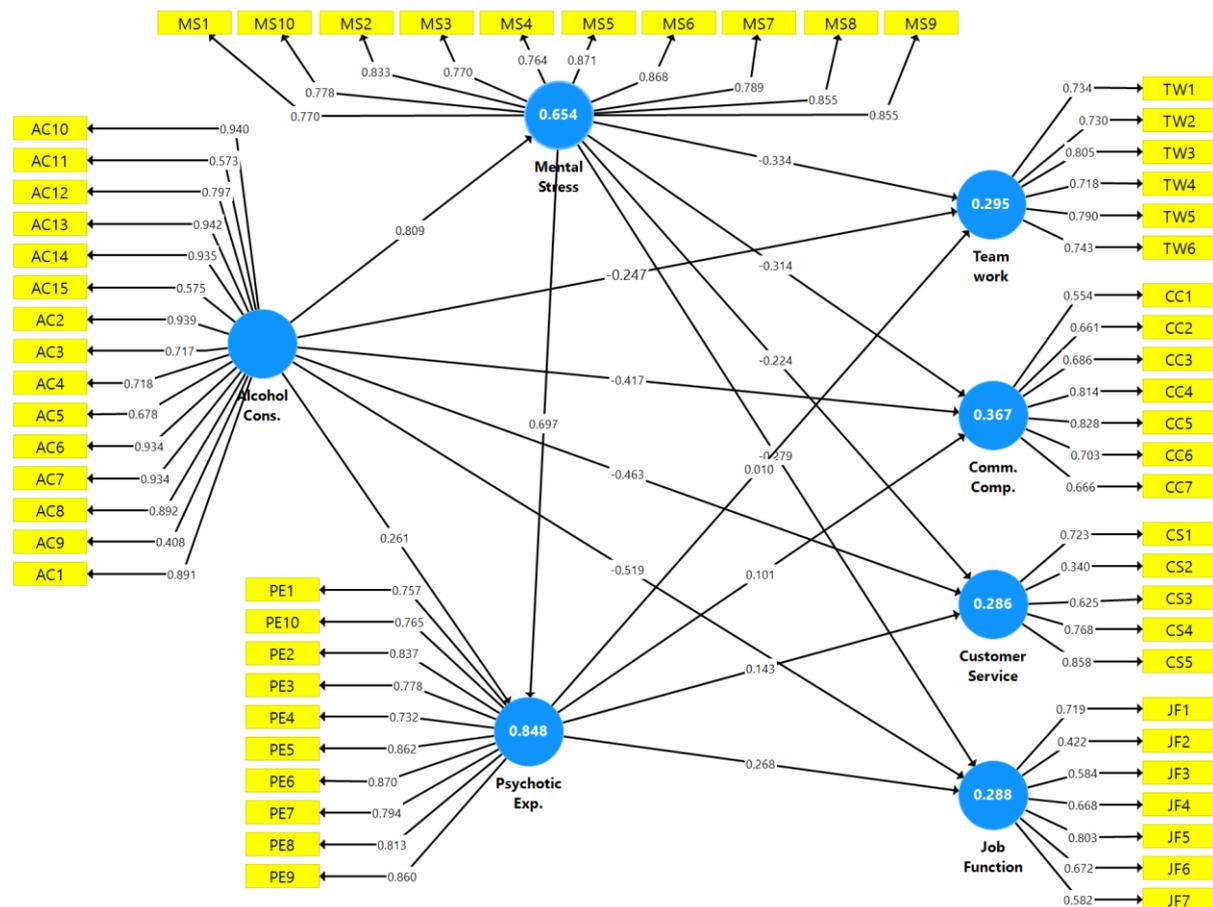

Figure 2: Fitted Structural Equation Model showing the direct and mediation linkages among AC, MS, PE, TW, CC, CS and JF

Quality Assessment: Construct, discriminant validity and Reliability

The construct validity of the outer model was evaluated using the Average Variance Extracted (AVE). AVE values greater than .50 indicate the attainment of construct validity following the Fornell-Lacker criterion (Ab Hamid et al., 2017; Owan, Emanghe, et al., 2022). As shown in Table 4, construct validity was achieved for all the latent variables since their AVE values are equal to or greater than .50. For discriminant validity, the Fornell-Lacker criterion (Fornell & Larcker, 1981) was used. Table 4 shows that the square roots of the AVE values (in bolded fonts) along the diagonal are greater than the correlation coefficients with other latent constructs. Thus, discriminant validity is achieved under the Fornell-Larcker criterion (Leguina, 2015). The Hetero-Trait Mono-Trait (HTMT) approach (Henseler et al., 2009) was also used to evaluate the outer model for discriminant validity. HTMT values must not exceed .90 to avoid discriminant validity concerns (Henseler et al., 2015; Owan et al., 2021). Table 4 shows that all the HTMT values (above the leading diagonal) are below the .90 threshold, indicating evidence of discriminant validity. The Reliability of the outer model was assessed using Composite Reliability (CR) rho_A and Cronbach alpha. Values for these statistics must be greater than .70 for evidence of internal consistency (Bassey et al., 2020; Owan, Odigwe, et al., 2022). Table 4 shows that all the CR, rho_A, and Cronbach alpha values are above the .70 threshold. Thus, there is evidence of internal consistency across these three criteria.

Table 4: Construct validity and Reliability

Variables	AVE	CR	rho_A	α	1	2	3	4	5	6	7
AC (1)	.65	.96	.97	.96	**.91**	.85	.88	.51	.61	.56	.53
MS (2)	.67	.95	.95	.94	.81	**.93**	.76	.55	.58	.49	.46
PE (3)	.65	.95	.94	.94	.82	.91	**.81**	.52	.55	.46	.42
TW (4)	.57	.89	.87	.85	-.51	-.52	-.50	**.94**	.73	.04	.76
CC (5)	.50	.87	.87	.84	-.59	-.56	-.53	.87	**.88**	.14	.16
CS (6)	.55	.81	.85	.71	-.53	-.47	-.44	.83	.86	**.79**	.87
JF (7)	.52	.83	.87	.77	-.52	-.46	-.41	.79	.76	.78	**.65**

Bolded values along the diagonal are Fornell-Larcker Discriminant validity coefficients.
Values above the diagonal are HTMT ratios.
Values below the diagonal are latent variable correlations.

Model fit assessment

When it comes to the overall model fit assessment, researchers have been warned to interpret them cautiously since they are not fully developed (Hair, Hult, et al., 2017) and, as a result, have not gained universal agreement on their use, unlike those of covariance-based structural equation modelling (Owan, Emanghe, et al., 2022). Nevertheless, the model (Figure 2) was evaluated using the following fit indices – Standardised Root Mean Residual (SRMR), Normed Fit Index (NFI), exact fit criteria (d_ULS and d_G) and RMS_theta (See Table 5). The SRMR values for the saturated and estimated models are less than the .08 threshold. The NFI values of .98 for both models are also higher than the cut-off value of .90. Under the d_ULS criteria, the estimated model showed evidence of an acceptable fit since its value is less than the upper bound of the confidence interval. However, the d_ULS value for the saturated model is greater than the upper bound of the confidence interval. Nevertheless, the model was accepted because the estimated model is more reasonable than the saturated model (Dijkstra & Henseler, 2015; Hair, Hollingsworth, et al., 2017). The model also performed well under the d_G assessment since all the values are lower than the confidence interval's lower and upper bounds. RMS_theta should be less than 0.12 (Henseler & Sarstedt, 2013). Table 5 shows an RMS_theta value of .058 (below the benchmark) and indicates the model's acceptability.

Table 5: Inner Model fit assessment

Fit Index	Threshold	Saturated Model	Estimated Model
SRMR	< .08	.008, CI [.008, .010]	.01, CI [.011, .013]
NFI	> .90	.982	.982
d_ULS	Nil	.126 [.118, .198]	.192, CI [.219, .288]
d_G	Nil	.357, CI [.372, .450]	.357, CI [.375, .529]
RMS_theta	< .12	.058	

Discussion of findings

The result of the first hypothesis showed that a significant direct negative effect of Alcohol Consumption (AC) and Mental Stress (MS) on graduates' job performance in terms of Teamwork (TW), Communication Competence (CC), Customer Service (CS) and Job Functions (JF). These results imply that high levels of AC and MS are associated with low job performance among higher education graduates. Therefore, the more graduates consume alcohol or face MS, the less likely they will perform well across the five indicators. This result is not surprising because AC affects the cognitive performance of individuals (Gunn et al., 2018; Rehm et al., 2017). Thus, the cognitive displacement of individuals might affect their physical behaviour, which can alter how victims relate with colleagues and other people at the workplace. This result corroborates other previous studies which have documented an unfavourable effect of excessive alcohol consumption on consumers' mood (Alford et al., 2020), workplace productivity (Łyszczarz, 2019; Stepanek et al., 2019) and presenteeism (Buvik et al., 2018; Lee et al., 2021). Past studies on mental stress have also documented its negative effect on job performance (Aduma et al., 2022; Akah, Owan, Aduma, et al., 2022; Daniel, 2019) and other work-related variables such as productivity (Ma & Ye, 2019; Ramos-Galarza & Acosta-Rodas, 2019) and job satisfaction (An et al., 2020; O'Brien et al., 2019).

One major surprise in the result of the first hypothesis is the direct positive effect of psychotic experience (PE) on graduates' job performance in terms of TW, CC, CS and JF, respectively. Although the effect was not substantial for all the job performance variables except JF, it is a surprise because an adverse effect was anticipated. The result suggests that graduates' job performance increases with their psychotic experiences and the other way around. The result is attributed to the temporary and inconsistent occurrence of PE, which could give room for graduates to refocus while at their duty posts. This result could also mean that the respondents of this study are not experiencing severe levels of psychosis. This result disagrees with the finding of some previous studies (Davies et al., 2018; Wu, Liu, et al., 2021), revealing that PE is linked to worse performance in adolescents and adults. The variation in the results is attributable to the context, nature of respondents and study designs.

The result of the second hypothesis revealed a significant direct positive effect of AC on MS and PE. AC solely accounted for 65% of the total variance in graduates' MS. The variance explained is high, making AC a substantial predictor of mental stress. This result implies that graduates that consume alcohol are also more likely to experience MS and PE. This result supports the finding of a previous study that alcohol use as a coping mechanism is associated with violent behaviours due to mental alterations (Bonomi et al., 2018). Similarly, another study found that alcohol use was associated with anxiety and depressive symptoms among males and females since COVID-19 started (Tran et al., 2020).

Furthermore, it was found that MS has a significant direct positive effect on PE. This aspect of the finding suggests that graduates who experience MS are also more likely to encounter psychosis. A reason for this result is the emotional and cognitive destabilisation that follows mentally stressed people. Consequently, there is a possibility that the harmful effects of mental stress on people may also be related to psychotic episodes, influencing individuals' work performance negatively. Previous studies have also documented a connection between

psychological stress and people's experiences with psychosis (Bolhuis et al., 2018; Kelleher et al., 2015). This result further aligns with a previous study (Jones et al., 2020) which discovered that exposure to stressful events, alcohol, methamphetamine usage, and cannabis use were all linked to an increased likelihood of developing psychotic characteristics.

The evidence of the third hypothesis revealed a significant joint mediation effect of MS and PE in linking AC to graduates' job performance in terms of TW, CC and CS, respectively. However, MS and PE did not jointly mediate the relationship between AC and graduates' JF significantly. Since the joint mediation effects were all adverse, graduates who consume alcohol are more disposed to perform poorly if they jointly experience mental stress and psychosis. This implies that MS and PE can strengthen the negative effect of AC on graduates' job performance. This finding is due to the negative effect of mental stress and psychotic experiences on graduates' job performance. This result corroborates another research which reported that academic stress significantly affects students' performance; stress impairs people's capacity to learn, work, and concentrate, all of which contribute to subpar work and performance (Pascoe et al., 2020).

This study's fourth hypothesis documented that mental stress has a significant partial mediation effect on the paths linking AC to all the graduates' job performance indicators. Similarly, PE proved to be a significant partial mediator of the connection between AC and graduates' JF. However, PE did not partially mediate AC's connection to graduates' TW, CC and CS. The direction of the mediation effect of MS was negative, suggesting that mental stress can solely compound the negative contribution of AC to graduates' job performance to a significant extent. This finding is attributable to the adverse effects that mental stress partially induced on graduates, thus, affecting their performance negatively. This finding supports the study's result that stress significantly impacts graduate students' capacity to learn and perform in the workplace (Pascoe et al., 2020). A previous study also found that very high levels of persistent mental stress were linked to worse academic performance (Lee et al., 2021). The positive mediation of PE on the nexus between AC and TW may be attributed to mood. Previous studies have reported that people with mood swings are more likely to develop psychotic feelings (Smith & Dubovsky, 2017; Zahodne et al., 2015). The mood may affect how they collaborate with team members to achieve collectively.

The fifth hypothesis of this study proved that PE significantly mediated the link between MS and JF to a significant extent. This result suggests that mentally stressed graduates with PE will function poorly in their jobs than those without PE. Thus, PE can catalyse the effect of MS on graduates' job functions. This aligns with a study which documented, after correcting for sex and age, that higher family functioning reduced the impact of perceived stress on psychotic-like symptoms (Wu, Zou, et al., 2021). However, in the current study, PE had no significant mediation effect linking MS to graduates' TW, CC and CS. This result suggests that even though PE has a mediation effect, the magnitude of the effect is insignificant in altering the effect of MS on graduates' CC, TW and CC. This means mentally stressed graduates are likely to communicate, collaborate and render customer services at about the same level as those with MS and PE.

The result of the sixth hypothesis documented that AC, MS, and PE jointly accounted for a significant portion of variances in graduates' TW, CC, CS and JF, respectively. Together, the three predictors significantly lowered all the graduates' job performance measures. The outcome points to a significant combined adverse influence from these three variables. This result is not unexpected, given that excessive alcohol use has been linked to lousy consumer outcomes in previous research (Atoyebi et al., 2020; Castellanos-Perilla et al., 2022; Hakulinen & Jokela, 2019; Rehm et al., 2017; Romac et al., 2022). Mental stress, on the other hand, disrupts people's thoughts (Kaiser et al., 2015; Rosiek et al., 2016), reasoning (Hidalgo et al., 2019; Schoofs et al., 2009), and functioning (Yaribeygi et al., 2017). The current study

confirms past findings from several studies that poorer academic performance in adolescents and adults correlates with psychotic events (Davies et al., 2018; Wu, Liu, et al., 2021). This explains why jointly possessing these three qualities simultaneously might be suicidal for a person, given the detrimental effects AC, MS and PE have previously been shown to have on human welfare.

Through the seventh hypothesis, this study proved that AC and MS jointly explained a significant proportion of the variance in graduates' psychotic experiences. This finding suggests that graduates may encounter psychotic episodes more frequently when alcohol is used, and mental stress occurs. These findings are consistent with earlier research, which showed that people with alcoholism may also have a mental illness and that people with schizophrenia and other psychotic illnesses are more likely to have issues with alcohol and other drugs, with prevalence rates as high as 50% (Addington & Addington, 2007; Petersen et al., 2007). The current study's findings confirm those of earlier research, revealing a clear association between routine exposure to stressful life events and psychotic episodes in a general population (DeVylder et al., 2020; Kelleher et al., 2015; Yates et al., 2019).

Limitations and future research implications

Just like every other study, this study faces some limitations. First, the study derived data from a cross-section of individuals that graduated between 2015 and 2020. This implies that the results of this study should be carefully generalised to those that graduated earlier or later. By using a cross-sectional design, this study is unable to tell when or what changes in the links among AC, MS, PE and graduates' job performance are likely to occur in the long run. Therefore, future research should consider using a longitudinal approach to examine such links. Thirdly, the scope of this study did not allow for comparisons of the effect of AC, MS, and PE on job performance among graduates with different demographic characteristics. Thus, it is recommended that a multigroup analysis be conducted using structural equation modelling to address this weakness. Lastly, the result of this study is from the Nigerian context and might differ from the situations in other contexts. Therefore, applying this study's findings in another context should follow revalidation studies.

Conclusion

This study used a partial least squares structural equation modelling to examine the joint and partial mediation effect of alcohol consumption on graduates' job performance across five indicators: teamwork, communication competence, customer service and job functions. The study proved that alcohol consumption is negatively associated with graduates' job performance across all the proxies. Similarly, mental stress had an inverse association with graduates' job performance variables but maintained a positive link with alcohol consumption and psychotic experiences. Psychotic experiences demonstrated significant positive ties with alcohol consumption but had a negligible positive effect on all graduates' job performance indices except for job functions. Mental stress and psychotic experiences jointly and partially mediated the nexus between alcohol consumption and graduates' job performance across the four indicators.

This study can help improve the work effectiveness of graduates and has revealed some negative predictors. This study can also enable employers to develop strategies to reduce alcohol consumption among employees for positive job performance. Such strategies might include the provision of counselling and therapeutic services to alcohol addicts, mentally stressed workers and those experiencing psychosis. Employers can also award outstanding employees for quality service delivery to enable workers to develop strategies to reach a similar milestone subsequent y. Such strategies might include workers adjusting their drinking lifestyle

and addressing their mental health and other underlying issues affecting their optimal service delivery.

Employers could also use strict measures to punish employees caught consuming alcohol to serve as a deterrent to others. Although this study focused on Nigerian graduates, the results could also be meaningful to graduates in other countries with similar socioeconomic characteristics as the sample of this study. Since alcohol consumption is associated with mental stress and psychotic experiences, graduates should understand that their job performance decreases drastically when these three jointly occur through alcohol. Therefore, it is recommended that graduates avoid alcohol or only consume mild quantities of it to enable them to function effectively in the workplace.

References

Aafreen, M. M., Priya, V. V., & Gayathri, R. (2018). Effect of stress on academic performance of students in different streams. *Drug Invention Today*, *10*(9), 1776–1780.

Ab Hamid, M. R., Sami, W., & Mohmad Sidek, M. H. (2017). Discriminant Validity Assessment: Use of Fornell & Larcker criterion versus HTMT Criterion. *Journal of Physics: Conference Series*, *890*, 12163. https://doi.org/10.1088/1742-6596/890/1/012163

Abas, M. C., & Imam, O. A. (2016). Graduates' competence on Employability Skills and Job Performance. *International Journal of Evaluation and Research in Education (IJERE)*, *5*(2), 119. https://doi.org/10.11591/ijere.v5i2.4530

Addington, J., & Addington, D. (2007). Patterns, predictors and impact of substance use in early psychosis: a longitudinal study. *Acta Psychiatrica Scandinavica*, *115*(4), 304–309. https://doi.org/10.1111/j.1600-0447.2006.00900.x

Aduma, P. O., Owan, V. J., Akah, L. U., Alawa, D. A., Apie, M. A., Ogabor, J. O., Olofu, M. A., Unimna, F. A., Ebuara, V. O., Essien, E. E., & Essien, C. K. (2022). Interactive analysis of demographic variables and occupational stress on university lecturers' job performance. *Humanities and Social Sciences Letters*, *10*(2), 88–102. https://doi.org/10.18488/73.v10i2.2952

Ajanovic, E., Aşkun, V., & Çizel, R. (2021). Comparative analysis of factors affecting employee performance according to job performance measurement method: The case of performing artists. *Ege Akademik Bakis (Ege Academic Review)*, *21*(1), 29–45. https://doi.org/10.21121/eab.874012

Ajayi, A. I., & Somefun, O. D. (2020). Recreational drug use among Nigerian university students: Prevalence, correlates and frequency of use. *PLOS ONE*, *15*(5), e0232964. https://doi.org/10.1371/journal.pone.0232964

Ajjawi, R., Tai, J., Huu Nghia, T. Le, Boud, D., Johnson, L., & Patrick, C. J. (2020). Aligning assessment with the needs of work-integrated learning: the challenges of authentic assessment in a complex context. *Assessment and Evaluation in Higher Education*, *45*(2), 304–316. https://doi.org/10.1080/02602938.2019.1639613

Akah, L. U., Owan, V. J., Aduma, P. O., Onyenweaku, E. O., Olofu, M. A., Alawa, D. A., Ikutal, A., & Usoro, A. A. (2022). Occupational stress and academic staff job performance in two Nigerian universities. *Journal of Curriculum and Teaching*, *11*(5), 64–78. https://doi.org/10.5430/jct.v11n5p64

Akah, L. U., Owan, V. J., Uduigwomen, G. A., & Akpa, S. U. (2022). Psychological variables

and healthy meal consumption among first cycle students in Calabar Metropolis, Nigeria. *Journal of Educational Research in Developing Areas (JEREDA)*, *3*(2), 223–236. https://doi.org/10.47434/JEREDA.3.2.2022.223

Akomolafe, C. O., & Aremu, E. T. (2016). Alternative sources of financing university education in Lagos State, Nigeria. *European Scientific Journal (ESJ)*, *12*(34), 284–296. https://doi.org/10.19044/esj.2016.v12n34p284

Akram, U., Gardani, M., Irvine, K., Allen, S., Ypsilanti, A., Lazuras, L., Drabble, J., Stevenson, J. C., & Akram, A. (2020). Emotion dysregulation mediates the relationship between nightmares and psychotic experiences: results from a student population. *Npj Schizophrenia*, *6*(1), 15. https://doi.org/10.1038/s41537-020-0103-y

Alford, C., Martinkova, Z., Tiplady, B., Reece, R., & Verster, J. C. (2020). The Effects of Alcohol Hangover on Mood and Performance Assessed at Home. *Journal of Clinical Medicine*, *9*(4). https://doi.org/10.3390/jcm9041068

An, J., Liu, Y., Sun, Y., & Liu, C. (2020). Impact of Work–Family Conflict, Job Stress and Job Satisfaction on Seafarer Performance. *International Journal of Environmental Research and Public Health*, *17*(7). https://doi.org/10.3390/ijerph17072191

Arop, F. O., Ekpang, M. A., Nwannunu, B. I., & Owan, V. J. (2018). Personnel management and corrupt academic practices in universities in Cross River State, Nigeria. *International Journal of Economics, Commerce and Management*, *6*(9), 405–419. https://doi.org/10.2139/ssrn.3250019

Atoyebi, O. A., Langat, G. C., & Xiong, Q. (2020). Cigarette Smoking, Alcohol Intake and Health Status of Older Persons in England: the Mediating Effects of Sociodemographic and Economic Factors. *Ageing International*, *45*(4), 380–392. https://doi.org/10.1007/s12126-020-09395-6

Bassey, B. A., Owan, V. J., & Agunwa, J. N. (2019). Quality assurance practices and students' performance evaluation in universities of South-South Nigeria: A structural equation modelling approach. *British Journal of Psychology Research*, *7*(3), 1–13. https://doi.org/10.5281/zenodo.4458641

Bassey, B. A., Owan, V. J., Ikwen, E. U., & Amanso, E. O. (2020). Teachers' attitudes towards learners with disability scale (TALDS): Construction and psychometric analysis. *The Journal of Social Sciences Research*, *6*(5), 518–530. https://doi.org/10.32861/jssr.65.518.530

Bewick, B. M., Trusler, K., Mulhern, B., Barkham, M., & Hill, A. J. (2008). The feasibility and effectiveness of a web-based personalised feedback and social norms alcohol intervention in UK university students: A randomised control trial. *Addictive Behaviors*, *33*(9), 1192–1198. https://doi.org/10.1016/j.addbeh.2008.05.002

Bolhuis, K., Koopman-Verhoeff, M. E., Blanken, L. M. E., Cibrev, D., Jaddoe, V. W. V, Verhulst, F. C., Hillegers, M. H. J., Kushner, S. A., & Tiemeier, H. (2018). Psychotic-like experiences in pre-adolescence: what precedes the antecedent symptoms of severe mental illness? *Acta Psychiatrica Scandinavica*, *138*(1), 15–25. https://doi.org/https://doi.org/10.1111/acps.12891

Bonomi, A., Nichols, E., Kammes, R., Chugani, C. D., De Genna, N. M., Jones, K., & Miller, E. (2018). Alcohol Use, Mental Health Disability, and Violence Victimization in College Women: Exploring Connections. *Violence Against Women*, *24*(11), 1314–1326. https://doi.org/10.1177/1077801218787924

Buvik, K., Moan, I. S., & Halkjelsvik, T. (2018). Alcohol-related absence and presenteeism: Beyond productivity loss. *International Journal of Drug Policy*, *58*, 71–77. https://doi.org/https://doi.org/10.1016/j.drugpo.2018.05.005

Caballero, C. L., & Walker, A. (2010). Work readiness in graduate recruitment and selection: A review of current assessment methods. *Journal of Teaching and Learning for Graduate Employability*, *1*(1), 13–25. https://doi.org/10.21153/jtlge2010vol1no1art546

Carrell, S. E., & West, J. E. (2010). Does Professor quality matter? Evidence from random assignment of students to Professors. *Journal of Political Economy*, *118*(3), 409–432. https://doi.org/10.1086/653808

Castellanos-Perilla, N., Borda, M. G., Cataño, S., Giraldo, S., Vik-Mo, A. O., Aarsland, D., & Rao, R. T. (2022). Specific depressive symptoms are related with different patterns of alcohol use in community-dwelling older adults. *Archives of Gerontology and Geriatrics*, *101*, 104696. https://doi.org/10.1016/j.archger.2022.104696

Chacón, C. R., Zurita, O. F., Puertas, M. P., Knox, E., Cofré, B. C., Viciana, G. V., & Muros, M. J. (2018). Relationship between Healthy Habits and Perceived Motivational Climate in Sport among University Students: A Structural Equation Model. *Sustainability*, *10*(4), 938. https://doi.org/10.3390/su10040938

Chikazhe, L., Makanyeza, C., & Kakava, N. Z. (2022). The effect of perceived service quality, satisfaction and loyalty on perceived job performance: perceptions of university graduates. *Journal of Marketing for Higher Education*, *32*(1), 1–18. https://doi.org/10.1080/08841241.2020.1793442

Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work Engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, *64*(1), 89–136. https://doi.org/10.1111/j.1744-6570.2010.01203.x

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, *24*(4), 385–396. http://www.ncbi.nlm.nih.gov/pubmed/6668417

Daniel, C. O. (2019). Effects of job stress on employee's performance. *International Journal of Business Management and Social Research*, *6*(2), 375–382. https://doi.org/10.18801/ijbmsr.060219.40

Davies, J., Sullivan, S., & Zammit, S. (2018). Adverse life outcomes associated with adolescent psychotic experiences and depressive symptoms. *Social Psychiatry and Psychiatric Epidemiology*, *53*(5), 497–507. https://doi.org/10.1007/s00127-018-1496-z

Debell, F., Fear, N. T., Head, M., Batt-Rawden, S., Greenberg, N., Wessely, S., & Goodwin, L. (2014). A systematic review of the comorbidity between PTSD and alcohol misuse. *Social Psychiatry and Psychiatric Epidemiology*, *49*(9), 1401–1425. https://doi.org/10.1007/s00127-014-0855-7

DeVylder, J. E., Koyanagi, A., Unick, J., Oh, H., Nam, B., & Stickley, A. (2016). Stress sensitivity and psychotic experiences in 39 low- and middle-income countries. *Schizophrenia Bulletin*, *42*(6), 1353–1362. https://doi.org/10.1093/schbul/sbw044

DeVylder, J. E., Waldman, K., Hielscher, E., Scott, J., & Oh, H. (2020). Psychotic experiences and suicidal behavior: testing the influence of psycho-socioenvironmental factors. *Social Psychiatry and Psychiatric Epidemiology*, *55*(9), 1167–1177. https://doi.org/10.1007/s00127-020-01841-9

Dijkstra, T. K., & Henseler, J. (2015). Consistent and asymptotically normal PLS estimators for linear structural equations. *Computational Statistics & Data Analysis*, *81*, 10–23. https://doi.org/https://doi.org/10.1016/j.csda.2014.07.008

Dorn-Medeiros, C. M., & Doyle, C. (2018). Alcohol as Coping: Internalized Homophobia and Heterosexism's Role in Alcohol Use among Lesbians. *Journal of LGBT Issues in Counseling*, *12*(3), 142–157. https://doi.org/10.1080/15538605.2018.1488230

Dumbili, E. W. (2015). A review of substance use among secondary school students in Nigeria: Implications for policies. *Drugs: Education, Prevention and Policy*, *22*(5), 387–399. https://doi.org/10.3109/09687637.2015.1041455

Ekaette, S. O., Ameh, E., & Owan, V. J. (2020). Statistical trends of school size, location and enrolment: An evaluation of public junior secondary schools for sustainable development. *World Journal of Vocational Education and Training*, *2*(2), 76–88. https://doi.org/10.18488/journal.119.2020.22.76.88

Ekaette, S. O., Ekpenyong, J. A., & Owan, V. J. (2019). School characteristics and enrollment trend in upper basic schools in Akwa Ibom State, Nigeria from 2008-2016. *Pedagogical Research*, *4*(3), Article em0039. https://doi.org/10.29333/pr/5855

Espinoza, O., González, L. E., McGinn, N., Sandoval, L., & Castillo, D. (2020). Should universities train teachers for employability or for effectiveness? *Teaching and Teacher Education*, *88*, 102960. https://doi.org/10.1016/j.tate.2019.102960

Eze, N. M., Njoku, H. A., Eseadi, C., Akubue, B. N., Ezeanwu, A. B., Ugwu, U. C., & Ofuebe, J. I. (2017). Alcohol consumption and awareness of its effects on health among secondary school students in Nigeria. *Medicine*, *96*(48), e8960–e8960. https://doi.org/10.1097/MD.0000000000008960

Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research*, *18*(3), 382–388. https://doi.org/10.1177/002224378101800313

Grzywacz, J. G., & Almeida, D. M. (2008). Stress and binge drinking: A daily process examination of stressor pile-up and socioeconomic status in affect regulation. *International Journal of Stress Management*, *15*(4), 364–380. https://doi.org/10.1037/a0013368

Gunn, C., Mackus, M., Griffin, C., Munafò, M. R., & Adams, S. (2018). A systematic review of the next-day effects of heavy alcohol consumption on cognitive performance. *Addiction*, *113*(12), 2182–2193. https://doi.org/10.1111/add.14404

Hair, J. F., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, *117*(3), 442–458. https://doi.org/10.1108/IMDS-04-2016-0130

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). SAGE Publications.

Hakulinen, C., & Jokela, M. (2019). Alcohol use and personality trait change: pooled analysis of six cohort studies. *Psychological Medicine*, *49*(2), 224–231. https://doi.org/10.1017/S0033291718000636

Hall, J. (2008). Encyclopedia of survey research methods. In Paul J. Lavrakas (Ed.), *Encyclopedia of survey research methods* (pp. 173–173). Sage Publications, Inc.

https://doi.org/10.4135/9781412963947 NV-0

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.), *New Challenges to International Marketing* (Vol. 20, pp. 277–319). Emerald Group Publishing Limited. https://doi.org/10.1108/S1474-7979(2009)0000020014

Henseler, J., & Sarstedt, M. (2013). Goodness-of-fit indices for partial least squares path modeling. *Computational Statistics*, *28*(2), 565–580. https://doi.org/10.1007/s00180-012-0317-1

Herath, H. M. W. M. M. W. M. (2019). Relationship between academic stress and academic achievements of the undergraduate students in Sri Lanka - A case study of undergraduates in Uva Wellassa university. *Global Journal of Human-Social Science: A Arts & Humanities - Psychology*, *19*(7), 1–7. https://socialscienceresearch.org/index.php/GJHSS/article/view/2884

Hidalgo, V., Pulopulos, M. M., & Salvador, A. (2019). Acute psychosocial stress effects on memory performance: Relevance of age and sex. *Neurobiology of Learning and Memory*, *157*, 48–60. https://doi.org/10.1016/j.nlm.2018.11.013

Irele, A. O., & Kayode, A. E. (2019). Impediments to Quality Education in Nigerian Tertiary Institutions. *Alternation - Interdisciplinary Journal for the Study of the Arts and Humanities in Southern Africa* 28(1), 267–277. https://doi.org/10.29086/2519-5476/2019/sp28.4a11

Jacob, L., Smith, L., Armstrong, N. C., Yakkundi, A., Barnett, Y., Butler, L., McDermott, D. T., Koyanagi, A., Shin, J. Il, Meyer, J., Firth, J., Remes, O., López-Sánchez, G. F., & Tully, M. A. (2021). Alcohol use and mental health during COVID-19 lockdown: A cross-sectional study in a sample of UK adults. *Drug and Alcohol Dependence*, *219*, 108488. https://doi.org/10.1016/j.drugalcdep.2020.108488

Jones, A. A., Gicas, K. M., Seyedin, S., Willi, T. S., Leonova, O., Vila-Rodriguez, F., Procyshyn, R. M., Smith, G. N., Schmitt, T. A., Vertinsky, A. T., Buchanan, T., Rauscher, A., Lang, D. J., MacEwan, G. W., Lima, V. D., Montaner, J. S. G., Panenka, W. J., Barr, A. M., Thornton, A. E., & Honer, W. G. (2020). Associations of substance use, psychosis, and mortality among people living in precarious housing or homelessness: A longitudinal, community-based study in Vancouver, Canada. *PLOS Medicine*, *17*(7), e1003172. https://doi.org/10.1371/journal.pmed.1003172

Kachadourian, L. K., Pilver, C. E., & Potenza, M. N. (2014). Trauma, PTSD, and binge and hazardous drinking among women and men: Findings from a national study. *Journal of Psychiatric Research*, *55*, 35–43. https://doi.org/10.1016/j.jpsychires.2014.04.018

Kaiser, B. N., Haroz, E. E., Kohrt, B. A., Bolton, P. A., Bass, J. K., & Hinton, D. E. (2015). "Thinking too much": A systematic review of a common idiom of distress. *Social Science & Medicine*, *147*, 170–183. https://doi.org/10.1016/j.socscimed.2015.10.044

Karam, E., Kypri, K., & Salamoun, M. (2007). Alcohol use among college students: an international perspective. *Current Opinion in Psychiatry*, *20*(3), 213–221. https://doi.org/10.1097/YCO.0b013e3280fa836c

Kelleher, I., Keeley, H., Corcoran, P., Ramsay, H., Wasserman, C., Carli, V., Sarchiapone, M.,

Hoven, C., Wasserman, D., & Cannon, M. (2013). Childhood trauma and psychosis in a prospective cohort study: Cause, effect, and directionality. *American Journal of Psychiatry*, *170*(7), 734–741. https://doi.org/10.1176/appi.ajp.2012.12091169

Kelleher, I., Wigman, J. T. W., Harley, M., O'Hanlon, E., Coughlan, H., Rawdon, C., Murphy, J., Power, E., Higgins, N. M., & Cannon, M. (2015). Psychotic experiences in the population: Association with functioning and mental distress. *Schizophrenia Research*, *165*(1), 9–14. https://doi.org/10.1016/j.schres.2015.03.020

Keyes, K. M., Hatzenbuehler, M. L., & Hasin, D. S. (2011). Stressful life experiences , alcohol consumption , and alcohol use disorders : the epidemiologic evidence for four main types of stressors. *Psychopharmacology*. https://doi.org/10.1007/s00213-011-2236-1

Khandaker, G. M., Barnett, J. H., White, I. R., & Jones, P. B. (2011). A quantitative meta-analysis of population-based studies of premorbid intelligence and schizophrenia. *Schizophrenia Research*, *132*(2–3), 220–227. https://doi.org/10.1016/j.schres.2011.06.017

Kiepek, N., & Baron, J.-L. (2019). Use of substances among professionals and students of professional programs: a review of the literature. *Drugs: Education, Prevention and Policy*, *26*(1), 6–31. https://doi.org/10.1080/09687637.2017.1375080

Kumari, R., & Garita, R. (2012). Relationship between stress and academic achievement of senior secondary school students. *Asian Journal of Multidimensional Research*, *1*(3), 152–160.

Lee, T. Y., Hsing, S. C., & Li, C. C. (2021). An improved stress-scale specifically designed to measure stress of women with newly diagnosed breast cancer. *International Journal of Environmental Research and Public Health*, *18*(5), 1–12. https://doi.org/10.3390/ijerph18052346

Leguina, A. (2015). A primer on partial least squares structural equation modeling (PLS-SEM). *International Journal of Research & Method in Education*, *38*(2), 220–221. https://doi.org/10.1080/1743727X.2015.1005806

Linscott, R. J., & van Os, J. (2013). An updated and conservative systematic review and meta-analysis of epidemiological evidence on psychotic experiences in children and adults: on the pathway from proneness to persistence to dimensional expression across mental disorders. *Psychological Medicine*, *43*(6), 1133–1149. https://doi.org/10.1017/S0033291712001626

Łyszczarz, B. (2019). Production Losses Associated with Alcohol-Attributable Mortality in the European Union. *International Journal of Environmental Research and Public Health*, *16*(19), 3536. https://doi.org/10.3390/ijerph16193536

Ma, L., & Ye, R. (2019). Does daily commuting behavior matter to employee productivity? *Journal of Transport Geography*, *76*, 130–141. https://doi.org/10.1016/j.jtrangeo.2019.03.008

Madukwe, E. C., Nwannunu, B. I., & Owan, V. J. (2019). Principals' supervisory techniques for combating corruption and the attainment of quality school governance in public secondary schools in Aba Education Zone of Abia State, Nigeria. *International Journal of Educational Benchmark*, *13*(2), 113–123. https://doi.org/10.5281/zenodo.4320661

Margolese, H. C., Malchy, L., Negrete, J. C., Tempier, R., & Gill, K. (2004). Drug and alcohol use among patients with schizophrenia and related psychoses: levels and consequences. *Schizophrenia Research*, *67*(2–3), 157–166. https://doi.org/10.1016/S0920-

9964(02)00523-6

Mauri, M. C., Paletta, S., & Di Pace, C. (2018). *Hallucinations in the Substance-Induced Psychosis BT - Hallucinations in Psychoses and Affective Disorders: A Clinical and Biological Approach* (P. Brambilla, M. C. Mauri, & A. C. Altamura (eds.); pp. 57–83). Springer International Publishing. https://doi.org/10.1007/978-3-319-75124-5_5

Mohamad, M. H., Baidi, N., Asshidin, N. H. N., Mohamad, M. S., & Subhi, N. (2018). The relationship between mental health, stress and academic performance among college student. In N. Nadiah Ahmad, N. Raida Abd Rahman, E. Esa, F. Hanim Abdul Rauf, & W. Farhah (Eds.), *Proceedings of the 8th International Economics and Business Managenent Conferences (IEBMC 2017)* (pp. 562–572). Future Academy. https://doi.org/10.15405/epsbs.2018.07.02.60

Molefe, G. N. (2012). Performance measurement model and academic staff: A survey at selected Universities in South Africa and abroad. *African Journal of Business Management*, *6*(15), 5249–5267. https://doi.org/10.5897/AJBM10.1394

Muchemwa, S. (2017). University Quality Assurance in Zimbabwe: A Case of Solusi University. *International Journal of Social Sciences & Educational Studies*, *4*(1). https://doi.org/10.23918/ijsses.v4i1p93

Na-Nan, K., Chaiprasit, K., & Pukkeeree, P. (2018). Factor analysis-validated comprehensive employee job performance scale. *International Journal of Quality & Reliability Management*, *35*(10), 2436–2449. https://doi.org/10.1108/IJQRM-06-2017-0117

Nabulsi, N., McNally, B., & Khoury, G. (2021). Improving graduateness: addressing the gap between employer needs and graduate employability in Palestine. *Education + Training*, *63*(6), 947–963. https://doi.org/10.1108/ET-06-2020-0170

O'Brien, W. H., Goetz, P. W., McCarren, H., Delaney, E., Morrison, W. F., Watford, T. S., & Horan, K. A. (2019). Job satisfaction among mental health workers: Associations with respiratory sinus reactivity to, and recovery from exposure to mental stress. In *Journal of Psychophysiology* (Vol. 33, Issue 1, pp. 32–38). Hogrefe Publishing. https://doi.org/10.1027/0269-8803/a000203

Odigwe, F. N. (2020). Assessment of internal revenue generation techniques of public secondary school managers in Cross River State, Nigeria. *Humanities and Social Sciences Letters*, *8*(4), 407–417. https://doi.org/10.18488/journal.73.2020.84.407.417

Odigwe, F. N., Offem, O. O., & Owan, V. J. (2018). Vocational training duration and university graduates' job performance in Cross River State, Nigeria. *International Journal of Current Research*, *10*(7), 72024–72028. https://doi.org/10.5281/zenodo.4320545

Odigwe, F. N., & Owan, V. J. (2019). Trend analysis of the Nigerian budgetary allocation to the education sector from 2009 – 2018 with reference to UNESCO'S 26% Benchmark. *International Journal of Educational Benchmark*, *14*(1), 1–14. https://doi.org/10.5281/zenodo.4458703

Oduwaiye, R. O., Yahaya, L. A., Amadi, E. C., & Tiamiyu, K. A. (2017). Stress level and academic performance of university students in Kwara State, Nigeria. *Makerere Journal of Higher Education*, *9*(1), 103–112. https://doi.org/10.4314/majohe.v9i1.9

Oketch-oboth, J. W. B. (2018). The relationship between levels of stress and academic performance among university of Nairobi students. *International Journal of Learning and Development*, *8*(4), 1–28. https://doi.org/10.5296/ijld.v8i4.13840

Onyebuchukwu, I. J., Sholarin, M. A., Benedict, A., & Emerenwa, C. (2015). The effect of alcohol consumption on the academic performance of undergraduate students. *Psychology and Behavioral Sciences*, *4*(4), 147–153. https://doi.org/10.11648/j.pbs.20150404.12

Osain, M. W., & Alekseevic, V. P. (2010). The effect of alcohol use on academic performance of university students. *Annals of General Psychiatry*, *9*(S1), S215. https://doi.org/10.1186/1744-859X-9-S1-S215

Owan, V. J., & Agunwa, J. N. (2019). Principals' administrative competence and teachers' work performance in secondary schools in Calabar Education Zone of Cross River State, Nigeria. *Humanities and Social Sciences Letters*, *7*(1), 20–28. https://doi.org/10.18488/journal.73.2019.71.20.28

Owan, V. J., Ekpenyong, J. A., & Asuquo, M. E. (2021). A structural equation model of principals' communication patterns, funds management and school-community relationship. *Journal of Pedagogical Sociology and Psychology*, *3*(1), 1–18. https://doi.org/10.33902/JPSP.2020364435

Owan, V. J., Emanghe, E. E., Denwigwe, C. P., Etudor-Eyo, E., Usoro, A. A., Ebuara, V. O., Effiong, C., Ogar, J. O., & Bassey, B. A. (2022). Curriculum management and graduate programmes' viability: The mediation of institutional effectiveness using PLS-SEM approach. *Journal of Curriculum and Teaching*, *11*(5), 114–127. https://doi.org/10.5430/jct.v11n5p114

Owan, V. J., Odigwe, F. N., Okon, A. E., Duruamaku-Dim, J. U., Ubi, I. O., Emanghe, E. E., Owan, M. V, & Bassey, B. A. (2022). Contributions of placement, retraining and motivation to teachers' job commitment: structural equation modelling of the linkages. *Heliyon*, *8*(4), e09334. https://doi.org/10.1016/j.heliyon.2022.e09334

Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth*, *25*(1), 104–112. https://doi.org/10.1080/02673843.2019.1596823

Petersen, L., Jeppesen, P., Thorup, A., Øhlenschlæger, J., Krarup, G., Østergård, T., Jørgensen, P., & Nordentoft, M. (2007). Substance abuse and first-episode schizophrenia-spectrum disorders. The Danish OPUS trial. *Early Intervention in Psychiatry*, *1*(1), 88–96. https://doi.org/10.1111/j.1751-7893.2007.00015.x

Plantilla, A. M. (2017). Graduates performance in the workplace: Employers' perspective. *Asia Pacific Journal of Multidisciplinary Research*, *5*(2), 186–198.

Ramos-Galarza, C., & Acosta-Rodas, P. (2019). Stress and productivity in workers of textile companies. *Journal of Fashion Marketing and Management: An International Journal*, *23*(1), 17–29. https://doi.org/10.1108/JFMM-02-2018-0030

Rehm, J., Gmel Sr, G. E., Gmel, G., Hasan, O. S. M., Imtiaz, S., Popova, S., Probst, C., Roerecke, M., Room, R., Samokhvalov, A. V, Shield, K. D., & Shuper, P. A. (2017). The relationship between different dimensions of alcohol use and the burden of disease—an update. *Addiction*, *112*(6), 968–1001. https://doi.org/10.1111/add.13757

Revadigar, N., & Gupta, V. (2022). Substance induced mood disorders. In *StatPearls*. StatPearls Publishing. http://www.ncbi.nlm.nih.gov/pubmed/32310347

Romac, D., Muslić, L., Jovičić Burić, D., Orban, M., Đogaš, V., & Musić Milanović, S. (2022). The Relationship between Alcohol Drinking Indicators and Self-Rated Mental Health (SRMH): Standardized European Alcohol Survey (SEAS). *Healthcare*, *10*(7). https://doi.org/10.3390/healthcare10071260

Rosiek, A., Rosiek-Kryszewska, A., Leksowski, Ł., & Leksowski, K. (2016). Chronic Stress and Suicidal Thinking Among Medical Students. *International Journal of Environmental Research and Public Health*, *13*(2). https://doi.org/10.3390/ijerph13020212

Schoofs, D., Wolf, O. T., & Smeets, T. (2009). Cold pressor stress impairs performance on working memory tasks requiring executive functions in healthy young men. *Behavioral Neuroscience*, *123*(5), 1066–1075. https://doi.org/10.1037/a0016980

Sengsri, S., & Agbi, A. (2020). ICT in Nigerian Educational System: Challenges and The Way Forward. *Journal for Research and Innovation, Institute of Vocational Education Bangkok*, *3*(1), 3–17. https://so06.tci-thaijo.org/index.php/ivebjournal/article/view/245012

Shakoor, S., Zavos, H. M. S., Haworth, C. M. A., McGuire, P., Cardno, A. G., Freeman, D., & Ronald, A. (2016). Association between stressful life events and psychotic experiences in adolescence: Evidence for gene–environment correlations. *British Journal of Psychiatry*, *208*(6), 532–538. https://doi.org/10.1192/bjp.bp.114.159079

Smith, B., & Dubovsky, S. L. (2017). Pharmacotherapy of mood disorders and psychosis in pre- and post-natal women. *Expert Opinion on Pharmacotherapy*, *18*(16), 1703–1719. https://doi.org/10.1080/14656566.2017.1391789

Spadola, C. E., Wagner, E. F., Varga, L. M., Syvertsen, J. L., De La Cruz Munoz, N. F., & Messiah, S. E. (2018). A Qualitative Examination of Increased Alcohol Use after Bariatric Surgery among Racially/Ethnically Diverse Young Adults. *Obesity Surgery*, *28*(6), 1492–1497. https://doi.org/10.1007/s11695-017-3022-x

Steenkamp, L. R., Bolhuis, K., Blanken, L. M. E., Luijk, M. P. C. M., Hillegers, M. H. J., Kushner, S. A., & Tiemeier, H. (2021). Psychotic experiences and future school performance in childhood: a population-based cohort study. *Journal of Child Psychology and Psychiatry*, *62*(3), 357–365. https://doi.org/https://doi.org/10.1111/jcpp.13281

Stepanek, M., Jahanshahi, K., & Millard, F. (2019). Individual, Workplace, and Combined Effects Modeling of Employee Productivity Loss. *Journal of Occupational and Environmental Medicine*, *61*(6). https://journals.lww.com/joem/Fulltext/2019/06000/Individual,_Workplace,_and_Combined_Effects.4.aspx

Tanner, J. L., & Arnett, J. J. (2016). The emergence of emerging adulthood: The new life stage between adolescence and young adulthood. In A. Furlong (Ed.), *Routledge handbook of youth and young adulthood* (2nd ed., pp. 32–39). Routledge. https://bit.ly/3okxFGk

Tran, T. D., Hammarberg, K., Kirkman, M., Nguyen, H. T. M., & Fisher, J. (2020). Alcohol use and mental health status during the first months of COVID-19 pandemic in Australia. *Journal of Affective Disorders*, *277*, 810–813. https://doi.org/10.1016/j.jad.2020.09.012

Tretyak, V., Kirsch, D. E., Le, V., Fromme, K., Strakowski, S. M., & Lippard, E. T. C. (2022). Coping drinking motives, neural functional coupling during emotion processing, and alcohol use in young adults with bipolar disorder. *Alcoholism: Clinical and Experimental Research*, *n/a*(n/a). https://doi.org/10.1111/acer.14885

Turley, D., Drake, R., Killackey, E., & Yung, A. R. (2019). Perceived stress and psychosis: The effect of perceived stress on psychotic-like experiences in a community sample of adolescents. *Early Intervention in Psychiatry*, *13*(6), 1465–1469. https://doi.org/10.1111/eip.12795

Undiyaundeye, F., & Otu, E. A. (2015). Entrepreneurship skills acquisition and the benefits

amongst the undergraduate students in Nigeria. *European Journal of Social Sciences Education and Research*, *4*(1), 9. https://doi.org/10.26417/ejser.v4i1.p9-14

Varese, F., Smeets, F., Drukker, M., Lieverse, R., Lataster, T., Viechtbauer, W., Read, J., van Os, J., & Bentall, R. P. (2012). Childhood adversities increase the risk of psychosis: A meta-analysis of patient-control, prospective- and cross-sectional cohort studies. *Schizophrenia Bulletin*, *38*(4), 661–671. https://doi.org/10.1093/schbul/sbs050

Wang, X., Liao, J., Xia, D., & Chang, T. (2010). The impact of organizational justice on work performance. *International Journal of Manpower*, *31*(6), 660–677. https://doi.org/10.1108/01437721011073364

Wu, Z., Liu, Z., Zou, Z., Wang, F., Zhu, M., Zhang, W., Tao, H., Ross, B., & Long, Y. (2021). Changes of psychotic-like experiences and their association with anxiety/depression among young adolescents before COVID-19 and after the lockdown in China. *Schizophrenia Research*, *237*, 40–46. https://doi.org/10.1016/j.schres.2021.08.020

Wu, Z., Zou, Z., Wang, F., Xiang, Z., Zhu, M., Long, Y., Tao, H., Palaniyappan, L., & Liu, Z. (2021). Family functioning as a moderator in the relation between perceived stress and psychotic-like experiences among adolescents during COVID-19. *Comprehensive Psychiatry*, *111*, 152274. https://doi.org/10.1016/j.comppsych.2021.152274

Yaribeygi, H., Panahi, Y., Sahraei, H., Johnston, T. P., & Sahebkar, A. (2017). The impact of stress on body function: A review. *EXCLI Journal*, *16*, 1057–1072. https://doi.org/10.17179/excli2017-480

Yates, K., Lång, U., Cederlöf, M., Boland, F., Taylor, P., Cannon, M., McNicholas, F., DeVylder, J. E., & Kelleher, I. (2019). Association of Psychotic Experiences With Subsequent Risk of Suicidal Ideation, Suicide Attempts, and Suicide Deaths. *JAMA Psychiatry*, *76*(2), 180. https://doi.org/10.1001/jamapsychiatry.2018.3514

Yung, A. R., & Lin, A. (2016). Psychotic experiences and their significance. *World Psychiatry*, *15*(2), 130–131. https://doi.org/10.1002/wps.20328

Zadarko-Domaradzka, M., Barabasz, Z., Sobolewski, M., Nizioł-Babiarz, E., Penar-Zadarko, B., Szybisty, A., & Zadarko, E. (2018). Alcohol Consumption and Risky Drinking Patterns among College Students from Selected Countries of the Carpathian Euroregion. *BioMed Research International*, *2018*, 1–9. https://doi.org/10.1155/2018/6084541

Zahodne, L. B., Ornstein, K., Cosentino, S., Devanand, D. P., & Stern, Y. (2015). Longitudinal Relationships Between Alzheimer Disease Progression and Psychosis, Depressed Mood, and Agitation/Aggression. *The American Journal of Geriatric Psychiatry*, *23*(2), 130–140. https://doi.org/10.1016/j.jagp.2013.03.014

Zavos, H. M. S., Freeman, D., Haworth, C. M. A., McGuire, P., Plomin, R., Cardno, A. G., & Ronald, A. (2014). Consistent etiology of severe, frequent psychotic experiences and milder, less frequent manifestations. *JAMA Psychiatry*, *71*(9), 1049. https://doi.org/10.1001/jamapsychiatry.2014.994